

Appl. No. 10/090,601
Atty. Docket No. 8877L
Amdt. dated 12/17/2003
Reply to Office Action of 09/18/2003
Customer No. 27752

REMARKS

Restriction is required between the following groups of claims as identified by the Examiner:

Group I – Claims 1-5, Process for producing three-dimensional articles

Group II – Claim 6, Article

Group III – Claims 7-11, Apparatus for producing three-dimensional articles

Applicant confirms, with traverse, the telephonic election of Group III, Claims 7-11. Traverse is based as follows.

Inventions I and II are said to be distinct because the product can be made by a materially different process, such as dissolving the mold and thereby avoiding separation of the molds parallel to the protruding members. Applicant respectfully submits such a process has not been shown to be feasible for the claimed three-dimensional articles – much less materially different. Accordingly, this Restriction Requirement is respectfully requested to be reconsidered and withdrawn. Groups II-III are likewise said to be distinct for the same reason, and this Restriction Requirement is respectfully requested to be withdrawn for the same argument set forth above.

The claims of Groups I and III are said to be related as process and apparatus for its use. The claims are said to be distinct because the apparatus can be used to practice a different process, such as a mold cavity “wherein there is no radial direction perpendicular to an axial direction” (p. 3). Applicant respectfully submits that in *any* coordinate geometry system¹, there is always a radial direction perpendicular to an axial direction. There need not be members extending in the purely radial or axial directions for this to occur, but such directions *always* exist. The apparatus cannot be used to practice a different process. Accordingly, the Examiner is emphatically requested to reconsider and withdraw the Restriction Requirement as pertains to Groups I and III.

Claims 7-10 are rejected under 35 USC §103(a) over Garneau Sr. (4,218,038). The Office Action states that Garneau teaches the basic apparatus for molding three-dimensional articles except the transport means for separating the mold segment. The Office Action further states that such a transport means is “well known and would have been obvious to one of ordinary skill ...” (p. 4). Applicant respectfully suggests that it was not known in the art to open mold

¹ The axial and radial directions are true and exist in any cylindrical (where such directions are most easily visualized), cubic, and spherical coordinate system.

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segments in a separation direction *parallel to members of the respective mold segment*. This distinction, required by Claim 7, is neither suggested by Garneau nor, to the best of Applicant's knowledge, found anywhere else in the art. Accordingly, such separation/transport could not be well known nor obvious to one of ordinary skill.

To elaborate, Garneau does not teach opening the mold cavities in a separation direction parallel to spacer walls 33,34. Instead, Garneau opens the mold cavity in a direction perpendicular thereto, as is well known in the art.² In fact, Garneau specifically teaches away from opening the mold halves in a direction parallel to the spacer walls 33,34 by stating that the mold half 27 is moved away "in a direction exactly perpendicular to the face surfaces and parting line" (31:51-52). The purpose of moving the mold half in this direction is to relieve pressure on the teeth of the comb "so that it is a simple matter to actuate the knock-out pins ..." (3:58-59). One reading Garneau would not be led to the present invention. Accordingly, Applicant respectfully submits Claim 7 is allowable without amendment.

Applicant notes with appreciation the indication of allowable subject matter in Claim 11. Applicant has added new Claim 12 reciting at least three mold segments. Basis is found in the specification (5:12-13). Claim 11 has been canceled and identical Claim 13 reciting four mold segments is added to depend from Claim 12.

Applicant has also added new Claims 14 and 15 reciting mold segments which subtend equal and unequal arcs about the longitudinal axis, respectively. Basis is found in the specification (5:15-16). No new matter is added.

Summary


Applicant has traversed the Restriction Requirement and respectfully requests the Restriction Requirement be withdrawn, particularly as to the claims classified in Groups I and III. Applicant respectfully submits Claim 7 is allowable as set forth hereunder, as the separation direction parallel to the members of the mold segment is neither shown in the prior art, nor derivable from reading Garneau, Sr. Applicants respectfully notes with appreciation the indication of allowable subject matter in Claim 11, and have added Claim 12 reciting at least three mold segments.

The Examiner is respectfully requested to reconsider and allow all claims remaining in the application.

² See Fig. 9 (2:24, mold halves in a closed position) and Fig. 11 (2:29, mold halves in the open position).

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